Place-based science and public-private partnerships key to preserving national parks

By John Dennis

At Director Mainella's request, the National Park System Advisory Board tasked its National Parks Science Committee to review the Natural Resource Challenge and offer recommendations regarding science and scientific resource management in the national parks. The committee submitted its report, titled "National Park Science in the 21st Century," to the Advisory Board in early August and the Advisory Board accepted the report with a request that the committee consider expanding its thoughts about the institutional role of scientists in parks.

The committee's report summarizes the role of national parks, the history and role of science associated with those parks, the trends of changes to natural systems in the 20th century, the dependence of national parks on the presence of functional connections to adjacent lands and waters, the utility of applying land-based concepts of resource protection to ocean resources, and the current status of Natural Resource Challenge implementation. The committee's report offers six recommendations for future directions for national park science. One is to make national parks part of a national system created by biologically linking protected areas. A second is to have the National Park Service contribute its resource protection experience to interagency efforts to improve the protection of freshwater and marine systems related to units of the National Park System. A third is for the Service to draw on its foundation of scientific and traditional knowledge to help improve the scientific literacy of our citizens and to help foster a national stewardship ethic. A fourth is to strengthen the Service's institutional capability for using scientific information in its resource protection activities. A fifth is to show how America's diverse human cultures have depended on and interacted with the natural world over time. A sixth is for the Service to encourage and work with a virtual consortium of many public and private partners to develop and maintain an electronic encyclopedia of America's natural history.

In conducting its review and offering these recommendations, the committee touched on how the Natural Resource Challenge is meeting its mission and contributing functions that support the committee's recommendations. The committee also offered a vision of what the National Park Service should strive to achieve over the long term. The committee found that the Challenge is embracing creativity through competition, effectiveness through peer review, and accountability and public awareness through rigorous reporting; is increasing the Service's use of science in resource inventory, monitoring, and restoration; and is emphasizing the incorporation of partnerships in all facets of Service activities. These attributes of the Challenge in turn empower the Service to carry out the committee's vision—that each national park serves as a center of enlightenment, that the Service advances the use of place-based science with involvement of a public-private virtual institute for preservation, and that people come to recognize that public enjoyment and protection of the natural integrity of parks are mutually dependent.

The National Parks Science Committee members, Sylvia A. Earle, Robert Chandler, Larry Madin, Shirley M. Malcom, Gary Paul Nabhan, Peter Raven, and Edward O. Wilson, together observed that the vital core of the national park idea is a "broad, inclusive sharing of unique segments of the American landscape with all native species" and that America's National Park System "represents a profoundly egalitarian concept: landscapes of incomparable beauty and grandeur that are to be shared and enjoyed by all people," a sharing that "would thus extend beyond the human species to all native flora and fauna of the parks." ■

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